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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,847	08/26/2003	Mark H. Machina	APTI:066	3853
37013 7590 01/29/2009 ROSSI, KIMMS & McDOWELL, LLP. 20609 Gordon Park Square, Suite 150 Ashburn, VA 20147				
EXAMINER				
CLEMENT, MICHELLE RENEE				
ART UNIT		PAPER NUMBER		
3641				
MAIL DATE		DELIVERY MODE		
01/29/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/648,847

Applicant(s)

MACHINA ET AL.

Examiner

Michelle (Shelley) Clement

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-10, 12, 14, 15, 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

1. Applicant's remaining arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection as necessitated by applicant's amendments.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 2, 4-10, 12, 14, 15, and 18-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite a projectile **for** firing from a firing device yet later recites specific interactions between the projectile and elements of the firing device (i.e. engaging the bore of the firing device). It is not clear whether applicant is attempting to claim the projectile **for use with** a firing device or the projectile **in combination with** a firing device.
4. Claims 1, 5, 8, 14 and 15 recite the limitation "the firing device". There is insufficient antecedent basis for this limitation in the claim in that a firing device has not been previously positively recited in the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4, 5-10, 12, 13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (US Patent # 2,044,819). Taylor discloses a projectile that *can be* fired from a firing device comprising; a hub (i.e. front/first portion) and a body (i.e. rear/second portion) (15, 5) extending from the hub, wherein the hub and the body are rotatably joined to each other to allow the hub and the body to rotate relative to each other at different rotational velocities when fired and until the projectile impacts a target and wherein the hub and the body are *configured* (i.e. have the ability) to engage a bore of a firing device. The hub has the ability to be broken (i.e. is frangible). The hub comprises a core and a plurality of fins (reference 19) extending outwardly from the core. The fins have the ability to break (i.e. are frangible) and have the ability to break and spread radially outwardly from the core as the hub penetrates a target. A leading portion of the fins is sloped at an angle (Figure 4). The hub and the body are rotatably joined with a bearing (reference 11). The projectile is stored and carried in a launching tube and due to the diameters shown both the hub and body have the ability to engage a bore and therefore it would be obvious for the projectile to engage a bore of the firing device when the projectile is fired from the firing device. Although Taylor does not expressly disclose that a second portion has less mass than the first portion, it is obvious from the figures that the portion containing the fins would have a mass less than the body portion and it has been held that discovering an optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claims 1, 4-10, 14, 15 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alford et al. (US Patent # 5,452,864). Alford et al. discloses a projectile that can be fired from a firing device comprising; a first/front portion (reference 32) and second/rear

portion (reference 31) extending from the first portion, wherein the first portion and second portion are rotatably joined to each other to allow the first portion and second portion to rotate relative to each other at different rotational velocities when fired and until the projectile impacts a target and wherein the first portion and second portion are configured (i.e. have the ability) to engage a bore of a firing device since the device is fired from a bore and there is nothing that would prevent the rear portion from engaging the bore. The first portion has the ability to be broken (i.e. is frangible). The first portion comprises a core and a plurality of fins extending outwardly from the core. The fins have the ability to break (i.e. are frangible) and have the ability to break and spread radially outwardly from the core as the hub penetrates a target. A leading portion of the fins is sloped at an angle. The first and second portions are rotatably joined with a bearing (reference 11). Both the hub and body have the ability to engage a bore and therefore it would be obvious for the projectile to engage a bore of the firing device when the projectile is fired from the firing device. In regards to claims 14, 15 and 18-22, Alford et al. discloses the apparatus comprising a firing device for firing a projectile, a cartridge has the ability of being chambered in the firing device, wherein the cartridge carries the projectile.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle (Shelley) Clement whose telephone number is 571.272.6884. The examiner can normally be reached on Monday thru Thursday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571.272.6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle (Shelley) Clement/
Primary Examiner, Art Unit 3641